



Environnement  
Canada

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## CCFP QUICK REFERENCE Collaborative Convective Forecast Product

Forecasts: [debra.blondin@noaa.gov](mailto:debra.blondin@noaa.gov)

Training: [scott.fox@faa.gov](mailto:scott.fox@faa.gov)

**CCFP** is a *strategic* forecast of convection to guide traffic managers in their system-wide approach to managing traffic. The CCFP consists of 3 elements: collaboration, forecasts and applications. The CCFP forecast suite is a set of 3 forecast maps with lead times of 4, 6 and 8 hours, updated every 2 hours. Release times, based on Eastern Local Time (ELT), are from 0300 ELT to 2300 ELT, whether on Standard Time or DST.

The CCFP forecast is used by airline industry and FAA participants of the Collaborative Decision Making (CDM) NAS planning process lead by the Federal Aviation Administration's Air Traffic Control System Command Center (ATCSCC).

**TRAINING:** Training briefings are available publically from the AWC website (below). Specific training for CDM participants is available via the ATCSCC website (below).

AWC: <http://aviationweather.gov/products/ccfp/info/>  
ATCSCC: [place link here]

### **COLLABORATION, FORECASTS & APPLICATION**

**Collaboration:** each CCFP is produced by the Aviation Weather Center after collaboration with Meteorological Service of Canada, Center Weather Service Units and meteorological offices of airlines and service providers.

**Forecast:** once the final product is produced, each CCFP is posted on the FAA's TSD, CCSD and on NOAA's aviation weather web site at:  
<http://www.aviationweather.gov/products/ccfp/>

**Application:** Planning TELCONs use the CCFP as the primary convective forecast product for strategic planning. This application by CDM participants results in a National Operations plan every two hours.

**VERIFICATION:** The accuracy, precision and consistency of every forecast are verified by the NOAA Earth System Research Laboratory, Global Systems Division. Daily, monthly and seasonal verification statistics and a description of the methodology used can be found at the Forecast System Labs (FSL) web site at:  
<http://www-ad.fsl.noaa.gov/fvb/rvts/conv/>

### **FORECAST CRITERIA**

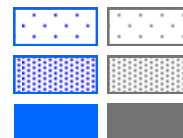
Forecast Region: the Continental U.S. from March 1st through late October and portions of southern Ontario and southern Quebec, Canada from April through Sept.

- At least 3000 square miles, and
  - A coverage of at least 25% with echoes of at least 40 dbz composite reflectivity, and
  - A coverage of at least 25% with echo tops of at least 25,000 feet MSL, and
- All three minimum threshold criteria are required for an area of convection to be included in a CCFP forecast polygon.

### **CONVECTION DESCRIPTORS:**

**Coverage:** identified within each area of convection, in one of four classes:

- Sparse 25-39% (sparse fill)
- Medium 40-74% (medium fill)
- Solid 75 – 100% (solid fill)



#### **Lines of coverage:**

- High coverage- Solid purple lines, either alone or within a polygon. The length of a line shall be at least 100nm, the width at least 20nm on either side of the line and coverage of 75 - 100%.
- Medium coverage- Dashed purple line, alone or within an area of coverage. The length of a line shall be at least 100nm, the width at least 20nm on either side of the line and coverage of 40 - 74%.

**Tops:** within each area of convection, the maximum 25% of *Echo Tops* with at least 18.5 dbz, identified in one of three classes:

- 25,000 – 29,000 feet MSL
- 30,000 – 34,000 feet MSL
- 35,000 – 39,000 feet MSL
- At or above 40,000 feet MSL

**Growth Rate:** given for each area or line of convection in one of four classes:

- (-) Negative Growth
- (NC) No Change
- (+) Moderate Positive Growth

**Movement:** arrow label indicates:

- Speed of movement in knots of the entire area (polygon)
- Direction of movement of the entire area (polygon)

**Confidence:** the forecaster's subjective estimate that conditions defined by the minimum CCFP criteria will occur in the forecast polygon at the specified time and place. It will be identified in one of two classes:

**Low** 25 – 49% (border & fill gray)

**High** 50 – 100% (border & fill slate blue)